REMARKS

Claims 1-12 stand rejected under 35 USC §102(e) as being anticipated by Grieshaber et al., U.S. patent 6,598,106.

Reconsideration and allowance of each of the pending claims 1-12 is respectfully requested in view of the following.

Grieshaber et al., U.S. patent 6,598,106 discloses a dual port enclosure monitor for servicing a dual port bus includes four primary components: two enclosure monitors and two bus expanders with isolation circuitry. The sub-system is configured such that an enclosure monitor and an expander are both connected to an external port. The internal bus then connects the two expanders, as well as all of the internal devices (e.g. hard drives, CD-ROMs, tape drives). The enclosure monitors can communicate with various host devices over the external buses. These host devices can instruct the enclosure monitor to either connect or isolate the internal bus, thereby the peripherals attached to it. This is accomplished through a set of independent control signals that run between the monitor and the expander. There are three different methods of control. The first is independent, paired control between enclosure monitor/bus expander pairs. A separate host controls each enclosure monitor/bus expander pair. The second involves the enclosure monitor/bus expander pairs having cross over control between the ports. There, a single host send requests to both pairs, but using the opposite port as the port to be isolated. The recipient enclosure monitor controls the opposite port from its connection port. The third method utilizes two dependent enclosure monitor/bus expander pairs. The pairs are connected through an

interconnection bus and can communicated isolation states as well as pass on isolation requests. As a further improvement, the pair of enclosure monitors is replaced with a single enclosure monitor, which controls both bus expanders.

Applicants respectfully submit that the bus expanders with isolation circuitry taught by Grieshaber are different from and are not equivalent to and do not provide the function of the edge expanders as taught and claimed in the present application.

For prior art to anticipate under §102 it has to meet every element of the claimed invention. (Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1379, 231 USPQ 81, 90 (Fed. Cir. 1986)). See also In re Bond, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990) ("'every element of the claimed invention must be identically shown in a single reference.'").

Claims 1 and 7 respectfully recite a method and apparatus for implementing resilient connectivity in a Serial Attached SCSI (SAS) domain and claim 11 recites a Serial Attached SCSI (SAS) network for implementing resilient connectivity in a SAS domain.

Independent claim 1 recites the steps of: connecting a first edge expander to a first port of a plurality of SAS devices for enabling communications between each of said plurality of SAS devices through said first edge expander; connecting a second edge expander to a second port of said plurality of SAS devices for enabling communications between each of said plurality of SAS devices through said second edge expander; and connecting together a subtractive routing port of each of said first

edge expander and said second edge expander for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices. Independent claim 7 recites apparatus comprising a plurality of SAS devices, each having a first port and a second port; a first edge expander and a second edge expander, each edge expander having a plurality of direct routing ports and a subtractive routing port; each of said plurality of direct routing ports of said first edge expander respectively connected to said first port of a respective one of said plurality of SAS devices for enabling communications between each of said plurality of SAS devices; each of said plurality of direct routing ports of the second edge expander respectively connected to said second port of a respective one of said plurality of SAS devices for enabling communications between each of said plurality of SAS devices; and said subtractive routing ports of said first edge expander and said second edge expander connected together for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices. Independent claim 11 recites a first edge expander and a second edge expander, each edge expander having a plurality of direct routing ports and a subtractive routing port; each of said plurality of direct routing ports of said first edge expander respectively connected to said first port of a respective one of a plurality of SAS devices for enabling communications between each of said plurality of SAS devices; each of said plurality of direct routing ports of the second edge expander respectively connected to a second port of a respective one of said plurality of SAS devices for enabling communications between each of said plurality of SAS devices;

and said subtractive routing ports of said first edge expander and said second edge expander connected together for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices.

The cited Grieshaber patent neither discloses the elements of the claimed invention nor their equivalents functioning in essentially the same way. To anticipate under section 102, a prior art reference must disclose all the elements of the claimed invention or their equivalents functioning in essentially the same way. The cited Grieshaber patent fails to disclose the use of any edge expander. In independent claim 1, the present invention teaches and claims connecting together a subtractive routing port of each of said first edge expander and said second edge expander for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices. Claims 7 and 11 recites that subtractive routing ports of said first edge expander and said second edge expander connected together for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices.

Only applicant teaches connecting a plurality of SAS devices with a first and a second edge expander and connecting together subtractive routing ports of the first edge expander and the second edge expander for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices.

The Grieshaber patent fails to disclose a subtractive routing port. Further

the Grieshaber patent fails to disclose any equivalent function for a subtractive routing port or for an edge expander as taught and claimed invention as taught by applicants and claimed in each of the independent claims 1, 7, and 11. Thus, the Grieshaber patent does not anticipate the claimed under section 102. Each of the independent claims 1, 7, and 11 is patentable.

Dependent claims 2-6, 8-10 and 12 depend from respective patentable claims 1, 7, and 11 further defining the invention. Dependent claims 2-6, 8-10 and 12 are patentable.

Applicants have reviewed all the art of record, and respectfully submit that the claimed invention is patentable over all the art of record, including the references not relied upon by the Examiner for the rejection of the pending claims.

It is believed that the present application is now in condition for allowance and allowance of each of the pending claims 1-12 is respectfully requested. Prompt and favorable reconsideration is respectfully requested.

If the Examiner upon considering this amendment should find that a telephone interview would be helpful in expediting allowance of the present application, the Examiner is respectfully urged to call the applicants' attorney at the number listed below.

Respectfully submitted,

By: Joan Pennington

Joan Pennington
Reg. No. 30,885
Telephone: (312) 670-0736